

Notice of Allowability

Application No.

10/079,479

Examiner

Ngoc-Yen M. Nguyen

Applicant(s)

LINDNER ET AL

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/18/2004.
2. ☒ The allowed claim(s) is/are 1,3-5 and 10-20.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Vincent Shier on December 10, 2004.

The application has been amended as follows:

1. (Current Amended) A silica ~~or silicate~~, having the following physicochemical characteristics:

BET surface area	from 50 to 700 m ² /g
DBP absorption	from 100 to 450 g/100 g
Choline chloride absorption	from 150 to 400 g/100 g (75% absorption by weight aqueous solution)
CTAB surface area	from 50 to 350 m ² /g
DBP/choline chloride absorption	less than 1.07.

2. (Canceled)

3. (Currently Amended) The silica ~~or silicate~~ of claim 1, comprising between 1 and 50% by weight based on total weight of at least one metal ion selected from the group consisting of Al, Mg, Ca, Ti, Zr, Fe and mixtures thereof.

4. (Currently Amended) The silica ~~or silicate~~ of Claim 1, having a modified Sears number of from at least 20 to 45.

5. (Currently Amended) The silica or silicate of Claim 1, having a BET surface area of 180-210 m²/g, a DBP adsorption of 280-450 g/100g, and a CTAB surface area of 130-200 m²/g.

6. – 9. (Canceled)

10. (Currently Amended) A process for preparing precipitated silica or ~~silicate~~, comprising

- simultaneously metering into an aqueous silicate solution more aqueous silicate solution and a Lewis and/or Brønsted acid to provide a mixture,
- acidifying the mixture to a pH of 7-3.0 to provide an acidified mixture
- optionally filtering the acidified mixture to obtain a filtered precipitated silica or silicate,
- optionally drying the filtered precipitated silica or silicate,

wherein the metered addition of the aqueous silicate solution and the Lewis and/or Brønsted acid is carried out while maintaining a constant alkali number in the mixture of at least 1, and

wherein said silica has the following physicochemical characteristics:

BET surface area from 50 to 700 m²/g

DBP absorption from 100 to 450 g/100 g

Choline chloride from 150 to 400 g/100 g (75% absorption by weight
absorption aqueous solution)

CTAB surface area from 50 to 350 m²/g

DBP/choline
chloride absorption less than 1.07.

11. (Original) The process of claim 10 wherein the alkali number is at least 15.
12. (Original) The process of claim 10, further comprising the addition of an electrolyte prior to or during the simultaneous addition of aqueous silicate solution and Lewis and/or Brønsted acid.
13. (Original) The process of claim 10, wherein at least one ion selected from the group consisting of Al, Ti, Zr, Fe, Mg, Ca and mixtures thereof are added prior to or during the simultaneous addition of aqueous silicate solution and Lewis and/or Brønsted acid.
14. (Currently Amended) A method comprising contacting the precipitated silica or silicate of claim 1 with a feed additive, a chemical intermediate, or a laundry detergent component.

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15. (Currently Amended) A method comprising contacting the precipitated silica ~~or silicate~~ of claim 1 with formic acid, propionic acid, lactic acid, phosphoric acid, choline chloride solution, a plant extract, a melamine resin, a coatings additive, a fragrance, or a detergent.

16. (Currently Amended) An elastomer, plastic, battery separator, toothpaste, catalyst support or flocculation assistant comprising the precipitated silica ~~or silicate~~ of Claim 1.

17. (Currently Amended) A process for preparing precipitated silica ~~or silicate~~, comprising:

- simultaneously metering into a vessel an aqueous silicate solution and a Lewis and/or Brønsted acid to provide a mixture,
- acidifying the mixture to a pH of 7-3 to provide an acidified mixture,
- optionally filtering the acidified mixture to obtain a filtered precipitated silica ~~or silicate~~,
- optionally drying the filtered precipitated silica ~~or silicate~~,

wherein the metered addition of the aqueous silicate solution and the Lewis and/or Brønsted acid is carried out while maintaining a constant alkali number in the mixture of at least 1, and

wherein said silica has the following physicochemical characteristics:

BET surface area from 50 to 700 m²/g

DBP absorption from 100 to 450 g/100 g

Choline chloride from 150 to 400 g/100 g (75% absorption by weight
absorption aqueous solution)

CTAB surface area from 50 to 350 m²/g

DBP/choline

chloride absorption less than 1.07.

18. (Original) The process of claim 17 wherein the alkali number is at least 15.

19. (Original) The process of claim 17, further comprising the addition of an electrolyte prior to or during the simultaneous addition of aqueous silicate solution and Lewis and/or Brønsted acid.

20. (Original) The process of claim 17, wherein at least one ion selected from the group consisting of Al Ti Zr Fe Mg Ca and mixtures thereof are added prior to or during the simultaneous addition of aqueous silicate solution and Lewis and/or Brønsted acid.

21. (Canceled)

In the title: Delete "and silicate".

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The declaration filed October 18, 2004 by Dr. Lindner shows that the product of Turk '379 does not have a ratio of DBP/choline chloride absorption ratio of less than 1.07 as required in the instant claim 1. Since the product claims are allowable and the other

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independent claims have been amended to include the allowable subject matter of the product claims, all claims have been rejoined.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc-Yen M. Nguyen whose telephone number is (571) 272-1356. The examiner is currently on Part time schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Stan Silverman can be reached on (571) 272-1358. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed (571) 272-1700.


Ngoc-Yen M. Nguyen
Primary Examiner
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nmn
December 10, 2004